### PHMC Environmental Management Performance Report – January 2002 Section E – 300 Area Facility Transition



# **Section E** 300 Area Facility Transition

# **PROJECT MANAGERS**

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### INTRODUCTION

The 300 Area Facility Transition consists of 324 Facility Safe Shutdown, 327 Facility Safe Shutdown, Miscellaneous Radiological Facilities Deactivation, and Project Management and Support, Project Baseline Summary (PBS) RL-RC06, Work Breakdown Structure (WBS) 3.1.6.

NOTE: Unless otherwise noted, all information contained herein is as of the end of January 2002.

Fiscal-year-to-date milestone performance (EA, DOE-HQ, and RL) shows that no milestones are due. For the remainder FY 2002, one milestone was completed ahead of schedule, one milestone is on schedule, one milestone is forecast late and one milestone will be deferred with a completion date yet to be determined.

## NOTABLE ACCOMPLISHMENTS

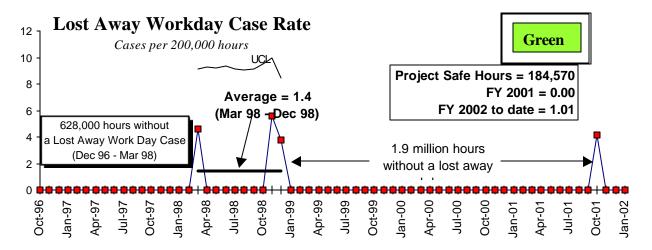
**324 Facility Safe Shutdown** — The 324 Building Spent Nuclear Fuel Removal Project, Integrated System Testing was initiated at 306E, and the Inner Canister Shield Plug welding demonstration was conducted. In addition, the 3-ton Jib Hoist replacement was initiated; the Auxiliary A Cell Hoisting System (AAHS) mock-up and walk-down were completed; and 324 basement cleanout activities commenced.

**327 Facility Safe Shutdown** — The 327 Building I Cell cleanout was completed. Additionally, the 327 Building Criticality Alarm System was removed from service; and the last available lead-lined drum was packaged and readied for shipment to the Central Waste Complex.

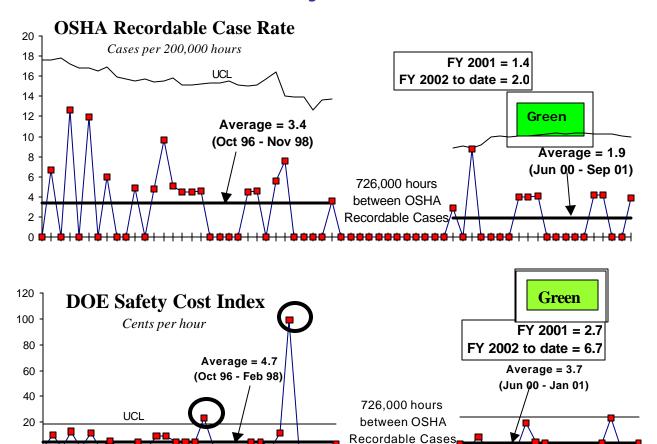
**Misc. Radiological Facilities Deactivation** — The isolation of the 303K building water was completed.

# **SAFETY**

River Corridor (RC) has achieved more than 184,570 safe work hours since the last Lost Away Workday case. The last Lost Away Workday case occurred on October 9, 2001. During the month of January there were no lost or restricted cases and one recordable case.



# **Safety** (Continued)



# **CONDUCT OF OPERATIONS**

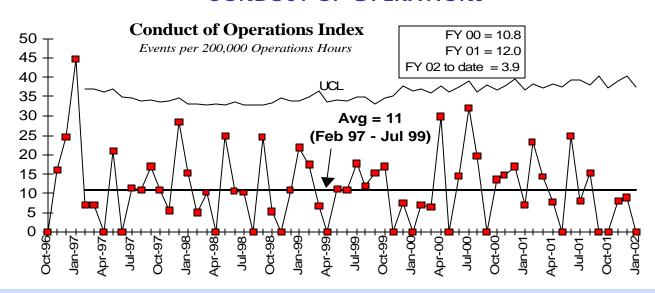
Oct-99

Jan-00

Jul-98

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Oct-96

Jan-97

Jul-97

Oct-97

Jan-98

Jan-01

Oct-01

Jan-02

# Breakthroughs / Opportunities for Improvement

# Breakthroughs

Monolithic Removal of 327 Hot Cells — To support accelerated 300 Area closure, RC is integrating decommissioning and demolition with deactivation activities where practical. Intact removal of the 327 hot cells appears to be technically feasible, to have potentially significant ALARA benefits, and result in a reduction of overall project schedule/cost. Certification that the hot cells can be disposed of as non-Transuranic waste is key to adopting monolithic removal as the technical baseline. The 327 Building Deactivation Project has prepared a draft characterization strategy to obtain necessary data to verify the cells as Low Level Waste (LLW). In support of this initiative, RC was successful in obtaining Accelerated Site Technology Deployment (ASTD) funding (\$935K) to purchase in-situ characterization instruments that will lead to the eventual LLW certification. A technical task plan to provide a schedule and milestones will be submitted to RL on February 14, 2002.

# **Opportunities for Improvement**

Conduct of Operations Improvement Initiative — RC has initiated a Conduct of Operations Improvement Plan to improve organizational performance, and to create a culture change regarding effective implementation of Conduct of Operations principles. RC has essentially completed the activities identified in the Conduct of Operations Improvement Plan. Each facility and participating organization has spent time reviewing its Conduct of Operations Matrix, identifying areas of improvement and communicating results to the staff. Project directors provide a summary review of progress to the RC Vice President at the two-, four-, and six-month milestones. The two and four-month reviews demonstrated that RCP facilities are actively participating at all levels, including at the worker level. Different projects have different levels of completion, however all are essentially on track for scheduled completion. The six-month status meeting will be held on February 7, 2002. The facilities are completing program documentation to build a Conduct of Operations Sustain and Maintain Plan to be completed throughout the remainder of the year.

# **UPCOMING ACTIVITIES**

**Spent Nuclear Fuel (SNF) Transfer** — Approve and issue NAC-1 SARP by February 28, 2002. Decontaminate initial NAC-1 Cask and ISO container by March 5, 2002.

**300 Area Miscellaneous Contaminated Facilities** — Shutdown 333 Building fire protection system by March 2002.

**324/327 Buildings** — Complete 26.5 percent remaining deactivation scope by June 30, 2002.

**Contract Transition** — Support transfer of FH scope to River Corridor Closure Contract (RCCC) on September 30, 2002, or 90 days preceding contract award.

# Milestone Achievement FH Contract Milestones

MSN	Title	Туре	Due Date	Actual Date	Forecast Date	Status/Comments
M-92-14	Complete Removal and Transfer, and Initiate Storage of Phase I 300 Area SCW and Materials	EA	9/30/02	3/28/00		Complete
TRP-02-700	Complete > 26.5% Remaining 324/327 Deactivation LC Scope	PI	6/30/02		6/30/02	Activities are on schedule.
TRP-01-202	Demolition of 377 Building	PI	6/30/02		TBD	Deferred to FY05 as a result of funding reductions; BCR in process to document change.
TRP-02-701	Support RCP Contract Transition Plan	PI	6/30/02		TBD	RCCC procurement is being delayed. Draft Plan is in development to support delivery to RL by 4/26/02.
M-92-15	Complete Removal and Transfer, and Initiate Storage of Phase II 300 Area SCW and Materials	EA	9/30/04	9/19/01		Complete

# PERFORMANCE OBJECTIVES

**Outcomes: Restore the River Corridor for Multiple Uses** 

Performa nce Indicator

FHI-M8 - 300 Area Cleanup

Measure 1: Accelerate 300 Area Cleanup Expectation 1: Deactivate 324/327 Buildings

Base: Complete 26.5% remaining 324/327-baseline work by June 30, 2002.

Base: Complete B Cell cleanout and shipment of B Cell waste to 200 Area Burial Grounds.

Stretch: Complete additional 2.5% remaining 324/327-baseline work.

Expectation 2: Disposition surplus facilities
Base: Disposition 3902A, 3802B & 303-K by
September 30, 2001.

Stretch: Disposition 377 Bldg. by June 30, 2002.

Expectation 3: Disposition uranium billets, uranium dioxide, scrap materials in 200/300 Areas, and 303-K thorium-232 by September 30, 2001.

Status

Of the remaining life-cycle work scope, 21.1 percent was completed during the period of October 2000 through January 2002. Complete.

As of January 31, 2002, the subproject completed an additional .72 percent (\$1.3M) toward the stretch goal.

Complete.

Work will not be performed in FY 2002 due to funding reductions. A BCR will defer the scope to FY 2005. Complete.

Measure 2: Support RC contract transition Expectation 1:

Stretch: Support RC contract transition by July 1, 2002.

RCCC procurement is being delayed. Draft plan is in development to support delivery to RL by April 26, 2002.

# FY 2002 SCHEDULE / COST PERFORMANCE – ALL FUND TYPES FY TO DATE STATUS – (\$000)

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Sub-Project	BCWS	BCWP	ACWP	SV	%	CV	%	BAC	
324 Facility Shutdown	7,641	6,772	7,671	(869)	-11%	(899)	-13%	25,610	
327 Facility Shutdown	1,734	1,626	1,716	(108)	-6%	(90)	-6%	6,767	
Misc. Facilities	1,178	824	676	(354)	-30%	148	18%	3,202	
 300 Area Project -	2,457	2,446	2,070	(11)	0%	376	15%	8,249	
Total 300 Area	13,010	11,668	12,133	(1,342)	-10%	(465)	-4%	43,828	

# FY TO DATE SCHEDULE / COST PERFORMANCE

The unfavorable schedule variance of \$1.3M (10 percent) is primarily due to workscope delays pending final Resource Management Board funding decisions. The unfavorable cost variance of \$0.5M (4 percent) is within the established thresholds.

For all active sub-PBSs and TTPs associated with the Operations/Field Office, Fiscal Year to Date (FYTD) Cost and Schedule variances exceeding + / - 10 percent or one million dollars require submission of narratives to explain the variance.

# Schedule Variance Analysis: (-\$1.3M)

#### 324 Facility Safe Shutdown — 3.1.6.1/RC06

Description and Cause: The unfavorable schedule variance was primarily due to delays with work scope that will not be performed in FY 2002 as a result of final work scope decisions by the Resource Management Board (RMB). This work scope includes procedure preparation for A-Cell Cleanout, equipment procurement related with B-Cell Final Cleaning and Piping Closure, engineering studies resulting from the 2012 Alignment planning and equipment removal/disposition from the Shielded Materials Facility (SMF). Contributing to the unfavorable condition are delays with the completion of the SNF transport system fabrication, D Cell camera and tugger procurements. The 324 PNNL Legacy Waste work scope is also delayed due to lack of resources to support planning.

Impact: Tool fabrication is on the critical path and could delay start of SNF shipments.

Corrective Action: The work scope identified by the RMB as a result of funding reductions will be deferred to the out years via the baseline change request process; 324 SNF management will continue to work toward schedule acceleration; and work is progressing with the PNNL Legacy Waste since resources have recently been allocated to perform this scope.

#### Misc. Radiological Facilities Deactivation — 3.1.6.3/RC06

**Description and Cause:** The unfavorable schedule variance was due to delays with the 377 Building demolition, pending final work scope decisions by the RMB.

Impact: No impact.

**Corrective Action:** This work scope selected for deferral due to funding reduction will be deferred to FY05 via a baseline change request, which is now in process.

All other sub-projects are within established thresholds.

# Cost Variance Analysis: (-\$0.5M)

### 324 Facility Safe Shutdown — 3.1.6.1/RC06

**Description and Cause**: The unfavorable cost variance was primarily due to overtime costs related to the 30 Ton crane repair, higher than planned costs related to the Pipe Trench and Spent Fuel activities.

Impact: Potential impact to overrun costs is being evaluated.

**Corrective Action:** Detailed analysis of labor, including overtime, and contract costs is taking place to determine cost reducing corrective actions.

#### Misc. Radiological Facilities Deactivation — 3.1.6.3/RC06

**Description and Cause:** The favorable cost variance was due to time phasing of contracts.

Impact: No impact.

Corrective Action: No corrective action required.

### 300 Area Facilities Project Mgt & Support — 3.1.6.4/RC06

**Description and Cause:** The favorable cost variance was primarily due to time phasing of contract and lower than planned fee assessment accruals.

Impact: No impact.

Corrective Action: No corrective action required.

All other sub-projects are within established thresholds.

# Funds Management FY 2002 FUNDS VS SPENDING FORECAST (\$000)

	H Funds allocation FYSF		FYSF	Variance	
River Corridor					
RC02, RC05, RC06, CP01					
Project Completion - Operating	\$ 38,865	\$	38,778	\$	87
Post 2006 - Operating	\$ 17,910	\$	17,851	\$	59
- Line Item					0
Total	\$ 56,775	\$	56,629	\$	146

[Status through January 2002]

Note: FH Reallocation reflects an FYSF adjusted for scope deletions, deferrals, and identified savings to address funding shortfalls, additional unplanned scope, and cost increases.

### **ISSUES**

# Technical, Regulatory, External, and DOE Issues and DOE Requests

**Issue:** Thorough and complete planning is required in preparation for the Spent Nuclear Fuel (SNF) removal from the 324 B Cell.

Impact: Without thorough and complete planning the activities may not be completed on schedule. Action Plan: A detailed critical path schedule has been developed that supports five SNF shipments from 324 by September 30, 2002, vs. two in the baseline schedule. The accelerated critical path schedule to complete five pressurized water reactor (PWR) spent fuel shipments to the 200 Area interim storage area by September 30, 2002 is currently three days behind schedule. FH personnel continue to work with the design/build contractor to identify recovery actions, not only in the fabrication/testing activities, but also in successor plant procedure development and training activities. As an example, receipt of the first cask will occur without the inner canister in order to support 324 Facility PWR cask mock-up and dry-run activities.

**Issue**: The Spent Nuclear Fuel Plan of Action (POA) must be approved.

Impact: An approved POA must be in place in order to proceed with activities.

**Action Plan**: POA was submitted to RL on January 11, 2002. Comments were received from RL on February 7, 2002. These comments were incorporated into the POA, and the revised POA targeted to be submitted to RL for approval on February 11, 2002.

Issue: Vendor delivery of 324 SNF equipment and accessories is needed to meet SNF schedule.

**Impact**: Equipment and accessories are necessary for completion of activities.

**Action Plan:** Fabrication efforts are ongoing. Several components associated with disassembly and consolidation of Boiling Water Reactor (BWR) fuel have completed fabrication and are now in mockup testing. All other components are in fabrication and timely completion is expected to occur in order to support the accelerated project activities.

Issue: Need to improve Radiation Control Program at 327 Building.

Impact: The Radiation Control Program at the 327 Building must be improved to ensure safety. Action Plan: The current schedule shows curium removal occurring during the first week of March; however, the date is anticipated to slip one week to implement a Radiation Control Program Improvement Plan in the facility.

**Issue**: Need to obtain RL, EPA, and Ecology agreement to modify 324 Closure Plan to CERCLA in support of realignment of the 324 baseline to the 2012 Plan. Must obtain Ecology and RL relief on FY 02 activities that are contrary to the 2012 Plan.

Impact: Without relief there will be no alignment with the 2012 Plan.

Action Plan: Negotiations for new RC TPA milestones began on November 8, 2001 and were completed the week of December 17, 2001. The draft milestones were issued for public review the week of January 22, 2002. The current draft milestones include a new milestone for the submittal of an amendment to the 324 closure plan by July '02. A kick-off meeting was held on January 10, 2002, and a schedule has been developed to prepare the closure plan amendment to RL June 26, 2002. The schedule is statused weekly in the RC path forward review.

Issue: Must complete 324 Shielded Material Facility (SMF) Artisan Arm procurement.

Impact: The Artisan Arm is required to complete activities in the SMF.

**Action Plan:** To better accommodate Arm modifications and project needs, the Factory Acceptance Test (FAT) has been rescheduled for the week of March 27, 2002 in Pittsburgh. Subsequent delivery to 324 is now targeted for the week of April 15, 2002.

Issue: 303K Foundation removal requires Notice of Construction (NOC).

**Impact**: The NOC is required to complete slab removal.

**Action Plan:** The NOC was approved by the State of Washington Department of Health/Environmental Protection Agency. Water was isolated on February 5, 2002. Planning is underway for FH to self-perform slab removal. Still striving to perform removal during March/April timeframe.

# BASELINE CHANGE REQUESTS CURRENTLY IN PROCESS

BCR No.	Date		lmp	pact	Date			
Level 4 WBS	Originated	Description	Days Dollars		Approved	Status		
RC06-02-002 3.1.6.1	10/29/01	SC/SS HEPA Filter Testing, CAT Facilities		\$9		Submitted for consolidated FH review on 1/11/02.		